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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/584,162

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KINSELLA

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KINS:002USC2

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EXAMINER

BALI, V

ART UNIT

PAPER NUMBER

2623

DATE MAILED:

04/11/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

# Office Action Summary

Application No.  
**09/584,162**

Applicant(s)  
**Kinsella**

Examiner  
**Vikkram Bali**

Group Art Unit  
**2623**



☐ Responsive to communication(s) filed on \_\_\_\_\_.

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claims

☒ Claim(s) 1, 2, 7-24, and 49-81 is/are pending in the application.

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☒ Claim(s) 1, 2, 7-24, 49-58, and 60-81 is/are rejected.

☒ Claim(s) 59 is/are objected to.

☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been  
☐ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_.

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 3

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

Art Unit: 2623

## DETAILED ACTION

### *Election/Restriction*

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1, 2, 7-24, 49-61 and 67-81, drawn to verification system, classified in class 382, subclass 124.
  - II. Claims 62-66, drawn to pointing device, classified in class 345, subclass 156.
2. The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention II has separate utility for pointing device.
3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.
4. During a telephone conversation with Michael Barrett on 4/3/01 a provisional election was made without traverse to prosecute the invention of Group I, claims 1, 2, 7-24, 49-61 and 67-81.

Art Unit: 2623

Affirmation of this election must be made by applicant in replying to this Office action.

Claims 62-66 withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(I).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 2, 10, 11-14, 49-56 and 60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matchett et al. (US 5229764) in view of Bogosian, Jr (US 5513272).

Art Unit: 2623

With respect to claim 1, Matchett discloses a biometric authentication matrix comprising: an interface for operably communicating with an electronic system; a position sensor, responsive to user movement thereof, for conveying positional information by way of said interface to the electronic system; a user-depressable button for conveying selection information by way of said interface to the electronic system; a biometric sensor disposed at a location such that when operating said pointing device in a normal manner a user's hand rests naturally in a position to place a finger of the user's hand in proximity to and readable by said biometric sensor, (see col. 11, line 65 through col. 12 line 5, also, the functions as claimed as the pointing device are the inherent functions of the computer mouse) as claimed in claim 1. However, Matchett fails to disclose the: a verification system ..... the audit log storage ..... said electronic system, as claimed in claim 1. Bogosian in system for verification teaches: a vesication system .....the audit log storage ..... said electronic system, (see col. 5, lines 25-33, wherein, there exist an storage data of the individuals who tried to gain access to or obtained data from a computer system and this storage could very well be used later for any kind of audits and or investigative objectives) as claimed.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the Matchett's system by introducing the features like storage data of the individuals who tried to gain access to or obtained data from a computer system, that is, there is an storage for keeping track of successful or unsuccessful attempts, as taught by Bogosian in the verification system of the person. This modification will provide an

Art Unit: 2623

authentication system that will make an pointing apparatus to be used as an authentication apparatus that will store the identification information “fingerprints” in a storage that will be easily used to compared to the criminal databases for catching the thief (see col. 5, lines 31-33 of Bogosian).

With respect to claim 2, Matchett further discloses: the biometric sensor ..... to the computer system, (see col. 11, line 65 through col. 12 line 5) as claimed in claim 2.

With respect to claim 10, Matchett further discloses: the position sensor comprises a mouse, (see col. 11, line 65-67) as claimed in claim 10.

With respect to claim 11, Matchett further discloses: one button position; and wherein the fingerprint sensor is disposed below a particular one of the at least one button positions, (see col. 11, line 65 through col. 12 line 5) as claimed in claim 11.

With respect to claims 12-14, Matchett and Bogosian discloses the invention substantially as claimed and discussed above. They fail to disclose: an operable button is located at the particular button position, as claimed in claim 12; an inoperable button is located at the particular button position, as claimed in claim 13; and no button is located at the particular button position, as claimed in claim 14. However, it is well known in the art for the computer mouse to have a button which is “operable button” with some functionality or “inoperable button” with no functionality or “no button” at all.

Therefore, it would have been obvious to one of ordinary skill in the art at the same time the invention was made to modify the Matchett and Bogosian biometric authentication apparatus

Art Unit: 2623

by introducing the well known features of the computer mouse like “operable button” or “inoperable button” or “no button” for making the mouse well suited for any individual for the purpose of authenticating the person or user.

With respect to claim 49-52, Matchett and Bogosian discloses the invention substantially as claimed and discussed in claim 1. However, they fail to disclose: the user ..... memory devices, as claimed in claim 49; one or more ..... flash memory, as claimed in claim 50; user storage ..... memory device, as claimed in claim 51; and user storage ..... encoded information, as claimed in claim 52. But, it is well known in the art to use memory devices to store the information in the encoded manner and also, there exist and used different devices for the memory such as CD-ROM, magnetic disk, optical disk, flash memory and removable memory device.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the Matchett’s and Bogosian’s system by introducing the features like using memory devices to store the information in the encoded manner and also, there exist and used different devices for the memory such as CD-ROM, magnetic disk, optical disk, flash memory and removable memory device as they are well known in the art. This modification will provide an authentication system that will use different sources of the memory to expand the storage of the apparatus giving the apparatus more storage resources.

With respect to claim 53-55, Matchett and Bogosian discloses the invention substantially as claimed and discussed in claim 1. However, they fails to disclose: authorization profile .....

Art Unit: 2623

electronic system, as claimed in claim 53; audit log ..... electronic system, as claimed in claim 54; and audit log storage ..... biometric sensor, as claimed in claim 55. But, the features like a date and time stamp and the function i.e. deposits, withdrawal, etc. and the amount on the ATM receipt “authorization profile” and if tried more than the threshold to access the machine and is the access is denied the machine will keep the access card for the security purpose, this shows that there is an storage for keeping track of successful or unsuccessful attempts “audit log storage”.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the Matchett’s and Bogosian’s system by introducing the features like a date and time stamp and the function i.e. deposits, withdrawal, etc. and the amount on the ATM receipt and if tried more than the threshold to access the machine and is the access is denied the machine will keep the access card for the security purpose, this shows that there is an storage for keeping track of successful or unsuccessful attempts, as these features are well known in the art of authentication. This modification will provide an authentication system that will make an pointing apparatus to be used as an authentication apparatus.

With respect to claims 56 and 60, the limitation cited in the claim is same as the limitations cited in claim 1 except of the limitation: a substance detection ..... biometric sensor as claimed. But it is well known in the art of the authentication to have one or more features to be compared for the authentication purpose.



Art Unit: 2623

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the Matchett's and Bogosian's system by introducing the feature like having one than one feature to be compared or evaluated for the purpose of authentication. This modification will provide an authentication system that will use one than one feature for the authentication of the person making the system more secure.

8. Claims 7-9, 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matchett et al. (US 5229764) in view of Bogosian (US 5513272) and further in view of Applicant's admitted prior art.

With respect to claims 7-9, Matchett and Bogosian discloses the invention substantially as claimed and discussed above. They fail to disclose: biometric sensor is ..... digitized scanned .....to said electronic system, as claimed in claim 7; biometric sensor is ..... a compressed digital .....to said electronic system, as claimed in claim 8; and biometric sensor is ..... of a minutia .....to said electronic system, as claimed in claim 9. But, it is well known in the art that the fingerprints are digitized, compressed and compared for the authentication of the individual as admitted by the applicant (see page 3, lines 18-21 of the specification).

Therefore, it would have been obvious to one of ordinary skill in the art at the same time the invention was made to modify the Matchett and Bogosian biometric authentication apparatus

Art Unit: 2623

by introducing the well known features like digitizing and compressing the data and the finally comparing it for the purpose of authenticating the person or the user.

With respect to claims 20 and 21, Matchett and Bogosian discloses the invention substantially as claimed and discussed above. They fail to disclose: interface comprises a cabled interface, as claimed in claim 20; and interface comprises a wireless interface, as claimed in claim 21. But, it is well known in the art of computer communication to have features like cable and wireless interface between the mouse and the computer for the communication purpose as admitted by the applicant (see page 4, lines 24-27 of the specification).

Therefore, it would have been obvious to one of ordinary skill in the art at the same time the invention was made to modify the Matchett and Bogosian biometric authentication apparatus by introducing the well known features like cable and wireless interface between the mouse and the computer for the communication purpose, this will make the authenticating apparatus more user friendly for the purpose of authenticating the person or the user.

9. Claims 15-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matchett et al. (US 5229764) in view Bogosian (US 5513272) and further in view of Bidiville et al. (US 5703356).

With respect to claim 15, Matchett and Bogosian discloses the invention substantially as claimed and discussed above. Matchett further discloses: fingerprint sensor is disposed below, (see col. 11, line 65 through col. 12 line 5). However, they fail to disclose: at least one button

Art Unit: 2623

positions numbers three; the fingerprint sensor is disposed below a centermost button position of the three button positions, as claimed in claim 15. Bidiville in a pointing device teaches: at least one button positions numbers three, (see figure 1, a three button mouse). And, having a sensor in the centermost button position of the three button positions is a design choice as it is known in the three button mouse that the centermost button has no functionality corresponds to it.

Therefore, it would have been obvious to one of ordinary skill in the art at the same time the invention was made to modify the Matchett and Bogosian biometric authentication apparatus by introducing the well known feature of the three button computer mouse like no functionality of the centermost button to be used for the fingerprint sensor and the three button mouse as taught by Bidiville, for making the mouse well suited for any individual for the purpose of authenticating the person or user.

With respect to claim 16, Matchett and Bogosian discloses the invention substantially as claimed and discussed above. However, they fail to disclose: the position sensor comprises a trackball as claimed in claim 16; the position sensor further includes a second trackball, as claimed in claim 17; the position sensor ..... left-handed user, as claimed in claim 18; and trackball is rotatably-connected to the pointing device, as claimed in claim 19. But, use of the trackball in place of the mouse is well known in the art as seen in col. 1, lines 47-51 of Bidiville as claimed in claim 16. Bidiville further teaches: the position sensor ..... left-handed user, (see col. 1, lines 53-58) as claimed in claim 18; and trackball is rotatably-connected to the pointing device, (see col. 1, lines 53-58) as claimed in claim 19.

Art Unit: 2623

With respect to claim 17, it is the design choice to use one or two trackball for the convenient sake.

Therefore, it would have been obvious to one of ordinary skill in the art at the same time the invention was made to modify the Matchett and Bogosian biometric authentication apparatus by introducing the well known feature of the trackball usage for the pointing device in place of the mouse and the mechanical construction of the trackball as taught by the Bidiville, for making the trackball well suited for any individual for the purpose of authenticating the person or user.

10. Claim 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matchett et al. (US 5229764) in view Bogosian (US 5513272) and further in view of O'Connor et al. (US 5838306).

With respect to claims 22-24, Matchett and Bogosian discloses the invention substantially as claimed and discussed above for claims 11. However, they fail to disclose: the fingerprint sensor includes an optical imaging array; and the particular button position includes a transparent material through which the user's fingerprint may be imaged by the imaging array as claimed in claims 22; and the fingerprint sensor includes a capacitive imaging array located at the particular button position contactable by the user's finger so that the user's fingerprint may be imaged by the capacitive imaging array, as claimed in claim 23. O'Connor in a mouse with security feature teaches: the fingerprint sensor includes an optical imaging array, (see col. 3, lines 7-10) and the particular button position includes a transparent material through which the user's fingerprint may

Art Unit: 2623

be imaged by the imaging array, (see figure 1, and col. 4, lines 1-5) as claimed in claims 22; and the fingerprint sensor includes a capacitive imaging array located at the particular button position contactable by the user's finger so that the user's fingerprint may be imaged by the capacitive imaging array, (see col. 3, lines 7-10 and see figure 1, and col. 4, lines 1-5) as claimed in claim 23.

It would have been obvious to one of ordinary skill in the art at the same time the invention was made to modify the Matchett and Bogosian biometric authentication apparatus by introducing the optical imaging array and the transparent material at the button of the mouse as taught by the O'Connor, for making the mouse well suited for any imaging the fingerprints for the purpose of authenticating the person or user.

With respect to claims 24, it is a design choice to have the fingerprint sensor incorporated at any button location.

Claims 61, 67-70, 71-78 and 79-81 are rejected as claims 1-24 and 49-60, because claims 61, 67-70, 71-78 and 79-81 are claiming similar subject matter as claims 1-24 and 49-60.

11. Claims 57 and 58 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matchett et al. (US 5229764) in view Bogosian (US 5513272) and further in view of Axelrod et al (US 5337358).

With respect to claims 57 and 58, Matchett and Bogosian discloses the invention substantially as claimed and discussed in claim 1. However, they fail to disclose: the substance

Art Unit: 2623

detection sensor ..... of the user, as claimed in claim 57; and verification system .....  
blood alcohol contents, as claimed in claim 58. Axelrod in authentication apparatus teaches:  
substance detection sensor ..... of the user, (see col. 4, lines 66-69) as claimed in claim 57.  
And, it is well known in the authorization art to prevent or allow the persons on the basis of the  
alcohol contents in the blood as claimed in claim 58.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time  
the invention was made to modify the Matchett's and Bogosian's system by introducing the  
features, a substance detection sensor for detecting the blood alcohol contents as taught by  
Axelrod and the well known feature of the authorization art i.e. to prevent or allow the persons  
on the basis of the alcohol contents in the blood. This modification will provide an authentication  
system that will make an pointing apparatus to be used as an authentication apparatus using two  
verification systems for the extra security.

***Allowable Subject Matter***

12. Claim 59 is objected to as being dependent upon a rejected base claim, but would be  
allowable if rewritten in independent form including all of the limitations of the base claim and any  
intervening claims.

Art Unit: 2623

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vikkram Bali whose telephone number is (703) 305-4510.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-4700.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, DC 20231

or faxed to:

(703) 308-9051 (for formal communications intended for entry)

(703) 308-5393 (for informal or draft communications, such as proposed amendments to be discussed at an interview, please label "PROPOSED " or "DRAFT")

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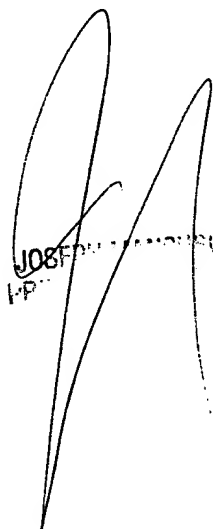
2121 Crystal Drive,

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Sixth Floor (Receptionist).

vb

April 4, 2001

A handwritten signature in black ink, appearing to be 'JP', is written over a circular stamp. The stamp contains the text 'J08' and '1P'.